

BLACKOUT PROTECTION OR WHY WE NEED A CLEAR PICTURE OF WHAT LIES AHEAD IN THE ENERGY MARKET

By Scott Rouse

Companies need to see the whole picture when in treacherous waters. This is especially true in today's energy markets. Energy was something we once took for granted. Electricity, in particular, was considered a boring, but relatively secure and reliable commodity. The prevailing view of industry restructuring enthusiasts suggested that the electricity market could be better managed through deregulation. This would result in greater investment, increased reliability and greater market competition, ultimately resulting in lower prices. All has not gone as planned.

Times have changed. We remain in restructuring transition and only time will tell how well energy markets will ultimately work. In the meantime, companies must take control and manage August, affecting 9,300 square miles and 50 million people. In ten seconds, 100 power units were suddenly offline. Could it happen again? Yes.

At the time, we faced pleas for usage curtailment as electricity was in order to protect their interests. was hoped the lower demand would avoid rolling blackouts. While this was successful in the short term, now we plan, and profit in this new market. strategy to move forward. Emphasis on the supply side plus the DEMAND side ed for a balanced plan.

t



Companies need to see the whole picture when in treacherous waters. This is especially true in today's energy markets.

August, affecting 9,300 square miles and 50 million people. In ten seconds, 100 power units were suddenly offline. Could it happen again? Yes.

At the time, we faced pleas for usage curtailment as electricity was restored. With everyone's contribution, it was hoped the lower demand would avoid rolling blackouts. While this was successful in the short term, now we need reflection and a well thought out strategy to move forward. Emphasis on the supply side plus the DEMAND side is needed for a balanced plan.

WHAT DOES THIS MEAN AND WHAT IS THIS 'CLEAR' PICTURE?

Although predicted, the sudden realization of losing energy for an extended time and being subjected to load curtailment and emergency measures has hit home. Similar to an elastic band, when stretched to its limit by supply constraints, ignoring energy efficiency measures and ever increasing demand, the system's flexibility reached its limit and snapped.

Needless-to-say, extensive investigations will be underway to discover the 'triggering event' and the actions or inactions that resulted in the largest blackout in North America's history. I suspect that a number of contributing factors will be debated and analyzed. And, at the end of the day, the question that remains of most relevance to companies is; "What does this mean to me, my company, and what are my options?"

Several ideas leap forward;

1. New respect for a commodity that has been taken for granted for too long.
2. A need for proactive corporate energy management plans.
3. Proven solutions and practices that can reduce risk and exposure in the future.

Regrettably, we discovered the hard way that energy is not something that we can take for granted. Electricity in particular cannot be stored and has become a vital commodity that requires a comparable investment to other critical areas of our business. Utility management in the past consisted of an efficient means to process utility bills. Today, we need to take control and manage energy proactively.

A Corporate Energy Management Plan is the first step. It provides the triple bottom line benefit to a company by providing economic prosperity, environmental responsibility and an increase in shareholder value. The blackout emphasizes another benefit of a proactive energy management plan — the security of

having contingency plans and knowing the impact of various options.

Several industry leaders realized the need for an energy plan and developed an energy manager network. In cooperation with NRCan's Office of Energy Efficiency, a network of energy practitioners was recently established under the umbrella of the Canadian Industry Program for Energy Conservation (CIPEC). Its vision is "energy efficiency should be part of everyone's business."

Peter Smith, responsible for energy with Bayer said, "Companies cannot rely on governments or regulatory agencies to ensure that they have a secure source of energy, they need to understand and manage their own risks."

The Network shares energy efficiency experiences and best practices and information is available at; <http://oee.nrcan.gc.ca/cipec/ieep/emn/emn.cfm>

Proven solutions and practices are available to help develop a corporate energy management plan, and more will be required. For example, the need for real time monitoring, in order to effectively measure and manage energy, is essential in today's market. This and related solutions will be explored in future articles.

NEXT STEPS

The wake-up call to invest in energy efficiency and better manage energy is loud and clear. Traditional means to manage energy are no longer adequate and new measures are required. In 1994, I managed an energy management program that Ontario Hydro established that saved \$90 million/year. In 1999, the program was recognized with the Canadian Energy Efficiency Award and in 2002, it received the US EPA Climate Protection Award. This and other proven success stories are available to help companies in developing their own energy management plan.

Blackout protection may appear too ambitious, but first steps exist to provide a better picture and a path towards the start of the journey.

Your comments and opinions are appreciated. You are welcome to join the CIPEC Energy Manager Network, and contribute to our collective path forward.
ET

*Scott Rouse is a professional engineer and a Managing Partner of Energy @ Work, Chair, CIPEC Energy Manager Network. He can be reached at Scott.Rouse@Energy-Efficiency.com. **ET***